

WHAT IS CLAIMED IS:

sub AI  
1. An article having photocatalytic activity which comprises a substrate, a first n-type semiconductor film as a primer layer formed over a surface of the substrate, and a photocatalyst film made of an n-type semiconductor and formed on the primer layer, said first n-type semiconductor film as the primer layer having an energy band gap larger than that of said photocatalyst film.

2. The article having photocatalytic activity as claimed in claim 1, wherein the photocatalyst film is an oxide semiconductor film comprising titanium oxide.

3. The article having photocatalytic activity as claimed in claim 1, wherein the first n-type semiconductor film as the primer layer is an oxide semiconductor film comprising at least one metal oxide selected from the group consisting of niobium oxide, tin oxide, aluminum oxide, zinc oxide and zirconium oxide.

4. The article having photocatalytic activity as claimed in claim 1, wherein the primer layer has a thickness of 5 nm or larger.

5. The article having photocatalytic activity as claimed in claim 1, wherein the photocatalyst film has a thickness of 30 to 2,000 nm.

6. The article having photocatalytic activity as claimed in claim 1, wherein the substrate is a transparent glass plate.

7. The article having photocatalytic activity as

claimed in claim 6, which has, interposed between the glass plate and the primer layer, an alkali diffusion preventive film which serves to prevent any alkali ingredient contained in the glass from diffusing into the photocatalyst film.

8. The article having photocatalytic activity as claimed in claim 1, which has a hydrophilic film formed on the surface of the photocatalyst film.

9. The article having photocatalytic activity as claimed in claim 7, which has a hydrophilic film formed on the surface of the photocatalyst film.